

Sample Information

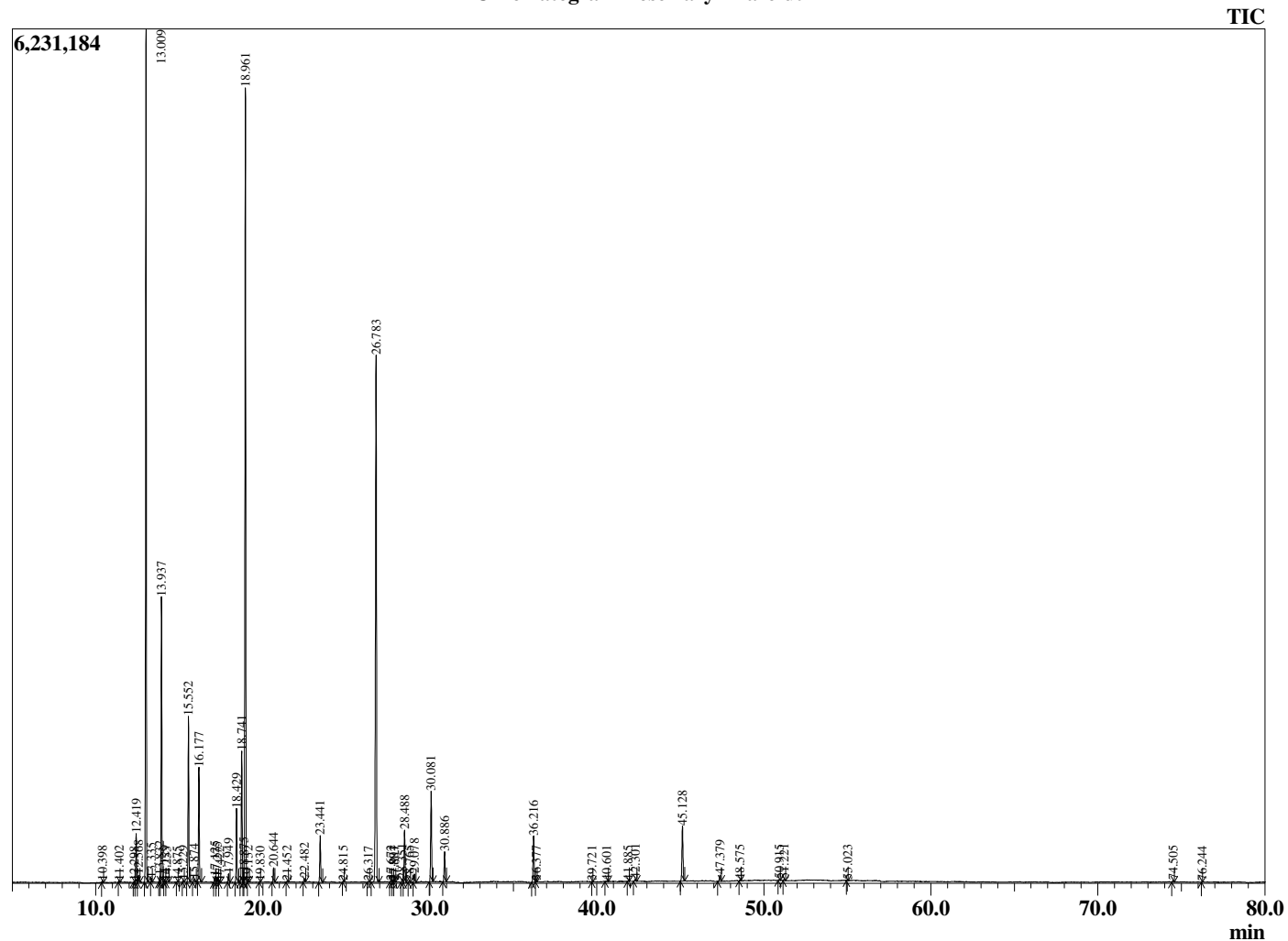
Analyzed by : Dr. Robert S. Pappas
 Analyzed : 3/16/2020 7:48:30 AM
 Sample Type : Essential Oil
 Sample Name : Rosemary - Barefut
 Sample ID : 0111
 Injection Volume : 0.10
 Instrument ID : GC-3



Peak Report TIC

R.Time	Name	Area%
10.398	Cyclofenchene	0.05
11.402	Bornylene	0.03
12.298	Hashishene	0.02
12.419	Tricyclene	1.19
12.568	alpha-Thujene	0.18
13.009	alpha-Pinene	21.76
13.335	beta-Fenchene	0.09
13.832	alpha-Fenchene	0.15
13.937	Camphene	7.31
14.129	Thuja-2,4(10)diene	0.03
14.253	Unidentified	0.04
14.875	Unidentified	0.02
15.229	Sabinene	0.04
15.552	beta-Pinene	4.42
15.874	Unidentified	0.11
16.177	Myrcene	3.18
17.125	Pseudolimonene	0.16
17.275	alpha-Phellandrene	0.15
17.422	delta-3-Carene	0.03
17.949	alpha-Terpinene	0.26
18.429	para-Cymene	2.04
18.741	Limonene	3.92
18.875	beta-Phellandrene	0.19
18.961	1,8-cineole	23.42
19.132	cis-beta-Ocimene	0.03
19.830	trans-beta-Ocimene	0.01
20.644	gamma-Terpinene	0.44
21.452	trans-Sabinene hydrate	0.04
22.482	Terpinolene	0.12
23.441	Linalool	1.47
24.815	alpha-Fenchol	0.02
26.317	trans-Pinocarveol	0.03
26.783	Camphor	18.42
27.672	Pinocamphone	0.05
27.801	Pinocarvone	0.03
27.887	Isoborneol	0.03
28.351	delta-Terpineol	0.12
28.488	Borneol	1.71
28.765	Isopinocamphone	0.06
29.078	Terpinen-4-ol	0.29
30.081	alpha-Terpineol	3.01
30.886	Verbenone	1.02
36.216	Bornyl acetate	1.60
36.377	Isobornyl acetate	0.03
39.721	Unidentified	0.02
40.601	Eugenol	0.03
41.885	alpha-Ylangene	0.03
42.301	alpha-Copaene	0.09
45.128	beta-Caryophyllene	2.02
47.379	alpha-Humulene	0.25
48.575	trans-Cadina-1(6),4-diene	0.03
50.915	gamma-Cadinene	0.03
51.221	delta-Cadinene	0.05
55.023	Caryophyllene oxide	0.03
74.505	Myrcene dimer I	0.07
76.244	Myrcene dimer II	0.01
		100.00

Chromatogram Rosemary - Barefut



Comments:

The analysis of this Rosemary, Spain batch sample meets the expected chemical profile for authentic essential oil of *Rosmarinus officinalis*. No contamination or adulteration was detected.

The results provided in this GCMS quality analysis reflect the chemical composition of the oil and lot referenced above on the date of analysis.